1:Wilson E-5 (1934-1938)1951 FN17 Ngonde FN17
Nyakyusa

planted at the break of the rains, and of the new crop, rice, in a seed-bed of ash prepared, and then it is grass and scrub which is burned; they do not fell or pollard trees to provide ash. For other crops there is no burning; the weeds are hoed in green instead; and, at a second hoeing before planting, the earth is piled into ridges or mounds to ensure drainage. Formerly, it is said, the chiefs insisted that the ridges on slopes should be made contour-wise, and recently this law has been revived. Elton, the first European to travel through the area, observed that there was 'terraced cultivation everywhere';[1] and the ridges do in fact look like terracing from a distance.

Hoeing is the work of men and boys; only quite recently have a few women, whose husbands are away in European employment, begun to hoe for themselves. And most men hoe for three or four hours a day during the greater part of the year, for crops are planted in succession. Neither old age nor high status excuses a man from this duty. Even the chief Mwaipopo, who was already grown up when the Europeans arrived in his country, hoed regularly in his fields during the years 1933–8. Iron hoes were made by Nyakyusa smiths from iron obtained from the Kinga,[2] but they were scarce, and some men had to use wooden hoes such as many of the women still have for weeding (*vide* Plate VII). The women are solely responsible for sowing, weeding, and reaping.

Cattle are fairly numerous:[3] few men over twenty-five nowadays own none, and many older men have four or five cows in their stalls. Long ago, we were told, cattle were scarcer, some men having to marry without them, but Cotterill (1876)[4] and Kerr-Cross (1891)[5] both said 'cattle abound' in Nyakyusa coun-

on 'Wanyakyusa Agriculture' (*The East African Agricultural Journal*, April 1941), warns that 'though the soil is not being eroded to any great extent it is still being impoverished'.

[1] Elton, *op. cit.*, pp. 326, 330.

[2] Thomson, *op. cit.*, Vol. I, pp. 272–3. Possibly iron was also obtained from the west. Kerr-Cross (*op. cit.* p. 163) saw large foundries in Nyika country before Ukiga. *cf.* Elton, *op. cit.*, p. 301 and map at the end.

[3] No census of the cattle in the district had been taken when we were among the Nyakyusa. D. H. Thomson, *op. cit.*, states that, 'The number of cattle in the district (Rungwe) in the 1931 census was about 2.3 head per taxpayer or 19 head per square mile'.

[4] H. B. Cotterill, 'On the Nyasa and a Journey from the North End to Ikombiro', *Proceedings of the Royal Geographical Society*, Vol. XXII (1878).

[5] D. Kerr-Cross, 'Cross-lakes north of Lake Nyasa', *The Geographical Journal*, Vol. V (1895), p. 119.

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Before passing on to consider how it is that the Nyakyusa distinguish between "better" and "worse" plots and pastures we must dwell for a moment longer on the technical aspect of their present use of land.

The *chitemene* system of agriculture so common in Central Africa has never been practised by the Nyakyusa, indeed the density of the population makes it impossible; they follow instead a system of intensive cultivation with rotation of crops. Villages are thus relatively stable and a man may, if he chooses, hoe the same ground year after year for a whole generation, letting each plot lie fallow in its turn. The great variety of crops which can be grown helps to determine the success of the Nyakyusa rotation system—maize, millet, sweet-potatoes, beans, ground-nuts, cow-peas, cassava and, in the plain, rice being their staple products. The men hoe deeply, using a long-handled iron hoe, the women weed with the aid of a short-handled wooden digging stick; different crops are planted at different seasons and most men do some hoeing in every month of the year. Every now and again a whole block of garden land that has been worked for some years may be allowed by common consent to revert to pasture. In the pasturing of cattle the most noteworthy point is the burning of the grass-lands; at the end of each short dry season in October or November, some of the pastures are fired so as to bring new shoots of tender grass with the first rains. The houses of a village are normally all built close together, each surrounded by bananas, with the main garden lands at some distance from them. The cattle are tied up at night in the houses and their dung is removed each morning and thrown down among the banana trees by the women of the household. The deliberate use of dung as manure is a novelty but is now general in the cultivation of coffee; on the gardens cattle dung is not used save in that one part of the district where land is beginning to be absolutely scarce, but the grass, which in this climate grows so quickly over them, is hoed in each year as green manure.

The first consideration which, in the case of arable land, leads the Nyakyusa to value some pieces of ground above others is a scientific[1] knowledge of the properties of different kinds of soil. "The men who are skilled in choosing ground for hoeing are those who have been long familiar with the soil. They know how soils differ and that one soil is best for maize, another for sweet-potatoes, one for peas, another for beans, one for ground-nuts another for pumpkins, one for millet, another for yams. And they can tell from the grass also, that where a certain

[1] By "scientific" knowledge is meant an intelligent understanding of facts based upon observation or experiment and which is not directly determined by any ultimate religious beliefs, save only the one belief that facts are intelligible.

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Nyakyusa

kind of grass grows there maize will do well, or maybe ground-nuts. Some grass-lands have very poor soil in which no crop at all will grow properly, the one we call *kyasi* for example, or again the one we call *nanyagasi* ("the ant"); no one hoes these lands. Some gardens we hoe on the higher ground, others near the streams, either right in the mud by the water or else in ground that is merely moist. On the higher ground we hoe millet, peas, sweet-potatoes, cassava and some other crops; in the muddy places by the water we hoe yams, building huge ridges for them called *fibimbiko*; and there too we sometimes put in (during the dry season) the shoots of sweet potatoes that we shall later plant elsewhere. If the soil is only a little muddy and is mixed with sand, then we plant maize there. The right soil for beans we call *kibumba*—a red soil which is sometimes mixed with sand. Ground-nuts we either plant in the *kibumba* (if it is the sandy kind) or else just in sand. Whenever a man is hoeing a field for millet or ground-nuts or sweet-potatoes, he can tell just from the soil whether his crop will do well or not."[1]

And so also the Nyakyusa well understand the different qualities of pasture. The cattle are herded by small boys but on most mornings one of the men also goes out with the herd to show the boys where to pasture it and what grass-land to avoid.

Into the value of arable land sentiment also enters and men like, *ceteris paribus*, to hoe their gardens where they themselves or their fathers and brothers have hoed before. So too the value of building plots is determined both by practical and emotional considerations: large and relatively level sites on which bananas grow well are preferred to narrow or steeply sloping ones or to sites where bananas do badly, but, on the other hand, of two equally convenient sites that with family associations is normally preferred. And in the case of building sites religious considerations may also enter. A friend of mine told me that, when his father died, he did not move but left his father's site vacant with the new grave upon it; a year or two later his millet crop unaccountably failed and the diviner told him that his father's spirit was angry that no one had "swept his grave," i.e. that the plot had been left vacant. My friend did not actually move, even then, for he preferred his own site; he compromised by the performance of a ritual sacrifice to his father's spirit. But in such cases a man will often move to his dead father's site for fear of further misfortunes.

We have discussed briefly the purposes for which and the techniques by means of which the Nyakyusa use their land, and we have indicated a few of the main considerations which lead them to value some particular

[1] Text written for me by a literate Nyakyusa.

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partly to the closer spacing of children. Whereas four years between births was conventional formerly, two or less is now usual. One of the characteristics of the present population is a disproportion between the sexes, the females outnumbering the males by 100 to 87·9 even when due allowance has been made for men away at work.[1] This disproportion is characteristic also of African populations in the south[2] and it appears likely that it is due to a wide difference in the survival rate of men and women, but the vital statistics necessary to test this hypothesis are lacking.

The increase in population, and the demand for coffee gardens and rice fields by men who prefer to earn cash by agriculture rather than as migrant labourers, has led to a shortage of land, already acute in the fertile lake-shore plain, and imminent in the coffee-growing villages of the hills.[3] Much land that was previously pasture land has been taken into cultivation, and signs of overstocking are everywhere apparent. Hillsides that in 1938 were covered with grass, waist high, now have a thin stubble. To aggravate matters, the care of stock is less efficient than it used to be because it is left to very small boys, their seniors being occupied with school and hoeing. Often the cattle are both ill nourished and covered with ticks—something that was never seen when they were herded by adolescents and carefully hand-dressed. The villagers themselves are as much concerned as the agricultural officers over the shortage of pasture and the decrease in the milk supply, but they are not prepared to accept the remedies recommended: namely, reduction of stock and stall-feeding. The advice of Europeans on the growing of rice and coffee crops, which they introduced to the district, is acceptable, but the Nyakyusa argue

[1] The Census figures cannot be taken as exact, but they give some indication of the increase in population, and the disproportion between men and women. In 1931 the population of Rungwe District was given as 135,080. In 1948 it was 256,388. In 1931 the proportion of males to females (Kukwe and Nyakyusa in Rungwe district) was 73·6 : 100 (Tanganyika Territory, *Census of the Native Population 1931*). In 1952 the figure for Tukuyu district as a whole was 80 : 100 (Tanganyika Territory, *East African Population Census, 1948*). Allowing for Kukwe men away without wives (estimate for 1934 less 10 per cent), the proportion is 87·9 : 100 (cf. P. H. Gulliver, *Report on the Migration of African Workers to the South from the Southern Highland Provinces, with special Reference to the Nyakyusa of Rungwe District, February 1953*, p. 18). The discrepancy in the figures given for adults was due to 1948, but the ages of males and females classed as 'adult' are uncertain.

[2] D. H. Houghton and E. M. Walton, *The Economy of a Native Reserve, Keiskammahoek Rural Survey*, vol. 2, pp. 198, 31. The sex ratio for Keiskammahoek District is 73·6 males : 100 females.

[3] cf. P. H. Gulliver, *Nyakyusa Land and Population*, 1958.

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that they have always been cattle men and they need no instruction on cattle. The tension over such limitation and soil conservation, so acute in many parts of Africa, is only just appearing in Rungwe district, but potentially it is serious.

Pressure on land, and the planting of a valuable long-term crop such as coffee, have undermined the traditional organization of age-villages. The old men are no longer prepared to move to make way for their sons and, without a new deal in land each generation, the territorial separation of the generations is blurred. Boys villages are no longer visible in the hills near Rungwe mission, partly because so many young men are away, either at school or in employment, but largely because most of the land is taken up with coffee gardens. Homesteads are being built farther apart as men lay out coffee round their houses, and sons often build on a corner of their father's estate instead of in a separate village. On the plain, also, the pressure of population blurs the boundaries between generations. Only in the least heavily populated middle belt are numerous boys' villages still clearly visible, and here too a 'coming out' has recently been celebrated, with some redistribution of land. The scarcest land, that in old volcanic craters, was always inherited, like cattle, not reallocated each generation, and almost all cultivated land is now treated in this way. In many chiefdoms, therefore, a young man looks to his father or senior brother for land, rather than to the village headman, and inheritance is supremely important. But the form of inheritance is changing: property now goes directly from father to son, not as formerly to each of a group of full brothers before reverting to the senior son of the eldest of them. The claims of more distant kinsmen on inherited stock are less than they used to be; such stock becomes the exclusive property of father and sons, rather than property in which members of a lineage of three or four generations have reciprocal rights. The main economic bond which held the lineage together, the exchange of cattle, is thus broken.

Formerly a marriage was a contract between lineages rather than between individuals. A girl was betrothed before puberty to a man of her father's choice and should he die she was still regarded as married to his heir. Should she die a sister replaced her. Ideally a marriage bond between lineages lasted for generations, each man who died being replaced by a brother or son, each woman by a sister or brother's daughter. The choice of a partner in marriage

137 to thickness. This part is devoid of timber except along some river banks—*Albizzia* and *Acacia* spp.—and fuel has to be carried some distance. The dominant herbs are *Cymbopogon citratus* and *Hyparrhenia* sp., with *Pteridium* and *Pennisetum purpureum* along the rivers.

Methods of Cultivation

241 The work of cultivation is equally divided
242 between the sexes. After the plots have been cleared and bunded by the men, it is women's work to plant, clean, harvest, winnow and sell at the market. Men's work consists of clearing, hoeing and looking after the cattle.

243 Rotation of crops is practised, as it must be
241 in an area where all land is for ever productive. In the highlands, 9,500 feet to 7,000 feet, the rotation in valleys is sweet potatoes, finger millet, groundnuts, finger millet, groundnuts, finger millet and rest for five years, or sweet potatoes, maize for five years and rest for five years. On the hillsides, finger millet and pigeon pea or finger millet alone are sown every fourth year.

In the medium altitudes, between 7,000 feet and 3,000 feet, the rotation is finger millet, maize and yams, beans, rested and grazed. Continual planting of rice cannot take place as fertility is so quickly impaired.

In the lower altitudes, below 3,000 feet, rice is planted continuously for some 15 years and the land is then rested and grazed for about 6 years.

Diet and Food Crops

242 No one food is the staple throughout the district, but plantains, maize and sweet potatoes for the higher altitudes and rice on the lake shore are generally eaten, with additions that vary from crop to crop.

243 Maize is planted both on contoured ridges and on flat land. Holes are drilled generally 2 feet apart and each hole has 3 seeds planted in it. Maize is usually interplanted with beans or Bambara groundnuts, groundnuts, cowpeas or pigeon peas. Planting takes place in the highlands in July to September and harvesting in February to April. In the medium altitudes, two crops are planted annually, in November to February and again in May to June. In the lower altitudes, however, little maize is grown and this is sown in November to December and harvested in March and April. Maize is stored in mud-covered basket granaries or is left on cobs as it is dried. It is often roasted or boiled with beans. The varieties of maize grown vary but they are mostly of the hard flint type.

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N 233 cattle to the district in the 1941 census was about 1.3 head per taxpayer or 11 head per square mile. Certain land is set aside each year for grazing, where stock is not able to interfere with the produce plots. Compensation for trespass of cattle on cultivated land is only paid among people of the lake shore.

E 656 134 185 242 Parts of the land to the west of Tukuyu have been badly eroded by cultivation and over-grazing, and it is only since 1939 that anti-erosion rules have been made to check the tendency for bad cultivation. Since they were brought in, however, the majority of the tribe have become very keen on seeing the effect that well-controlled cultivation has on crops. The following are the Native Authority Rules concerning anti-erosion:—

"Throughout the Rungwe District, all natives shall follow orders regarding cultivation designed to prevent soil erosion or destruction and enjoined by the Agricultural Officer.

(a) All ridges and terraces shall be constructed and set below the slope of the hill.

(b) In the case of cultivation done on the flat and not on ridges or terraces, a large ridge and ditch shall be dug at the top of the plot to remain permanently and be repaired from time to time."

N 935 [1935] The Wanyakyusa have never been dependent on outside sources for any of their food, but in their own territory there is no rock for making hoes nor clay for making earthenware pots. The former they were accustomed to get from Ukinga, on the eastern boundary of the district in the Livingstone mountains, and the pots were, and are still, made only by about 100 members of the Wakisi tribe living in a village on the lake shore at the extreme south-western point of the district. The Wakisi are really of Ukinga origin and inhabit the eastern, northern and western shores of Lake Nyasa. They grow no food except cassava, and that only sparsely, and apart from the one village that makes the pots, their only work is as peddlers of canoes and fishermen. Most of their fish and pots are exchanged for food.

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N 403 Since the Tukuyu District is so thickly populated and the inhabitants concentrated, it has been found necessary to create produce markets at comparatively short distances. Transport from these markets, during wet time, has become difficult. The natural outlet for Tukuyu native foodstuffs is the Lupa Goldfields, which lie about 100 miles to the

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